

WHAT IS CLAIMED IS:

1. A line driver couplable to a transmission path having line characteristics associated therewith, comprising:

a driver stage configured to send a signal along said transmission path; and

a switching network, coupled to said driver stage, configured to adaptively select a power level to send said signal as a function of said line characteristics of said transmission path.

2. The line driver as recited in Claim 1 wherein said driver stage comprises a plurality of amplifiers configured to amplify said signal.

3. The line driver as recited in Claim 2 wherein said driver stage comprises a reference circuit configured to provide a reference level associated with said plurality of amplifiers.

4. The line driver as recited in Claim 1 wherein said switching network comprises a plurality of switches configured to adaptively select said power level.

5. The line driver as recited in Claim 1 wherein said
2 switching network comprises a plurality of switches configured to
3 couple an output of said line driver to ground.

6. The line driver as recited in Claim 1 wherein said power
2 level includes a level up to about 21 volts.

7. The line driver as recited in Claim 1 wherein said line
2 driver forms a portion of a front end of a transceiver.

8. A method of operating a line driver coupled to a
transmission path having line characteristics associated therewith,
comprising:

sending a signal along said transmission path; and

adaptively selecting a power level to send said signal as a
function of said line characteristics of said transmission path.

9. The method as recited in Claim 8 wherein said sending is
performed by a driver stage comprising a plurality of amplifiers
that amplify said signal.

10. The method as recited in Claim 9 wherein said sending
further comprises providing a reference level associated with said
plurality of amplifiers.

11. The method as recited in Claim 8 wherein said adaptively
selecting is performed by a switching network comprising a
plurality of switches.

12. The method as recited in Claim 8 wherein said adaptively
selecting further comprises coupling an output of said line driver
to ground.

15. A transceiver coupled to a transmission path having line characteristics associated therewith, comprising:

a conversion stage that converts signals between an analog and digital domain;

a filter stage, coupled to said conversion stage, that filters said signals; and

a line driver, including:

a driver stage configured to send a signal along said transmission path; and

a switching network, coupled to said driver stage, configured to adaptively select a power level to send said signal as a function of said line characteristics of said transmission path.

16. The transceiver as recited in Claim 15 wherein said driver stage comprises a plurality of amplifiers configured to amplify said signal.

17. The transceiver as recited in Claim 16 wherein said driver stage comprises a reference circuit configured to provide a reference level associated with said plurality of amplifiers.

18. The transceiver as recited in Claim 15 wherein said
2 switching network comprises a plurality of switches configured to
3 adaptively select said power level.

19. The transceiver as recited in Claim 15 wherein said
2 switching network comprises a plurality of switches configured to
3 couple an output of said line driver to ground.

20. The transceiver as recited in Claim 15 wherein said power
2 level includes a level up to about 21 volts.